



### Treatment Control BMPs Unapproved List

The list below names recognized storm water treatment control Best Management Practices that by review of studies, design, and available information would not be suitable for installation at Vernon facilities.

| <b>Storm Water Best Management Practices (BMPs)</b>  | <b>Description</b>   | <b>Reasons not suitable for installation at facilities in Vernon</b>  |
|--|--|---|
| <b>Retention/Irrigation</b><br>(a.k.a. cistern)  | Capture of stormwater runoff in a holding pond and subsequent use of the captured volume for irrigation of landscape.  | Designed to capture and store water that, depending on specifics, may be accessible to mosquitoes and other vectors for breeding. Must provide landscape. |
| <b>Wet Ponds</b><br>(a.k.a. stormwater ponds, retention ponds, wet extended detention ponds)                                 | Constructed basins that hold stormwater throughout wet season.   | High potential for mosquitoes and other vectors. Public access and safety concerns.   |
| <b>Constructed Wetlands</b>  | Similar to Wet Ponds but differ in primarily being shallower and having greater vegetation area.   | High potential for mosquitoes and other vectors. Public access and safety concerns.   |
| <b>Extended Retention Basins</b><br>(a.k.a. dry ponds, extended detention basins, detention ponds, extended detention ponds) | Basins whose outlets have been designed to detain the stormwater runoff for a minimum time (i.e.48 hrs.) to allow particles and associated pollutants to settle. | Mainly used for flood control and not storm water pollution prevention. Only moderate removal of pollutants.  |
| <b>Bioretention</b>  | Holding area that filters through soil and plants and recaptures the water by a perforated pipe.   | High potential for mosquitoes and other vectors by design.  |
| <b>Wet Design Media Filters</b>  | Usually 2 chambered structure which includes a settling basin and a filter bed filled with sand or other absorptive filtering media.                             | Designed to maintain a permanent source of standing water where mosquito and midge breeding is likely to occur.   |



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| <b>Water Quality Inlet</b><br>(a.k.a. trapping catch basins, oil/grit separators or oil/water separators) | Consist of one or more chambers that promote sedimentation of coarse materials and separation of free oil (as opposed to emulsified or dissolved oil)  | Poor removal of constituents and standing water in device can provide a breeding ground for mosquitoes and other vectors. |
| <b>Manufactured Wetland</b>   | In a manufactured wetland, gravel substrate and subsurface flow of the stormwater through the root systems force the vegetation to remove nutrient and dissolved pollutants from the stormwater. | Potential for mosquitoes and other vectors by design. Insufficient historical and performance data.                       |
| <b>Wet Vault</b>  | Vault with a permanent water pool, generally 3 to 5 feet deep.   | Designed to maintain a permanent source of standing water where mosquito and midge breeding is likely to occur.           |
| <b>Certain Vortex Separators</b><br>(a.k.a. swirl concentrators)  | Considered a type of wet vault but differs by being round, rather than rectangular, and the water moves in a centrifugal fashion before exiting.   | Potential for mosquitoes and other vectors.   |